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OFFICE OF THE
REGIONAL ADMINISTRATOR

July 24, 2002

Mr. John Silva, ANE-600
Federal Aviation Administration
New England Regional Office
12 New England Executive Park
Burlington, Massachusetts 01803

RE: Final Environmental Impact Statement for Logan Airside Improvements Planning Project
Boston-Logan International Airport Boston, Massachusetts dated June, 2002
EPA ERP # FAA-B51017-MA

Dear Mr. Silva:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Final Environmental Impact Statement (FEIS) for the proposed Logan Airside Improvements Planning Project at Boston-Logan International Airport, Boston, Massachusetts.

The FEIS describes the Massachusetts Port Authority's (Massport) proposal to build a 5000 foot runway (runway 14/32) to improve how the airport functions and therefore reduce delay in poor weather and unfavorable northwest winds. The preferred alternative remains largely consistent with the one described in the Supplemental Draft Environmental Impact Statement (SDEIS) and also includes changes to the southwest corner taxiway, Taxiway Delta and Taxiway November and reductions in approach minimums on runways 22L, 27, 15R and 33L. Decision-making for a proposed centerfield taxiway featured in both the Draft Environmental Impact Statement (DEIS) and SDEIS has been deferred to allow the FAA to conduct an additional study with respect to this part of the project. The FEIS also considers a number of mitigation measures and other "environmentally beneficial actions" associated with the preferred alternative including, among others: a unidirectional restriction for runway 14/32; a restriction on the use of runway 14/32 to times when winds are 10 knots or greater; residential sound insulation; a new Preferential Runway Advisory System (PRAS); and a demand management program. The FEIS defends conclusions presented in the SDEIS about the regional jet (RJ) fleet mix, runway utilization, and the utility of the 5000 foot runway.

As you know, EPA has raised concerns about the project and its impacts in comments on the DEIS and the SDEIS. We appreciate the time and attention that FAA has taken to respond to our comments in the FEIS. We view the FEIS as a step toward commitments to measures designed to reduce impacts associated with the proposed project and the Record of Decision (ROD) as the last

crucial point in the NEPA process when remaining issues must be resolved. We offer the following comments on the FEIS and how we believe the ROD must strengthen efforts to further minimize the impacts associated with the proposed project.

Wind Restriction on Runway 14/32

EPA supports the concept of using a northwest/southeast wind restriction, as FAA proposes, to limit the potential shifts of flights around the airport. FAA's proposal particularly benefits Chelsea and East Boston, which appear to have among the highest concentrations of minorities of the communities impacted by noise from over-flights. EPA believes, however, that the ROD needs to clarify several pressing issues surrounding the proposed restriction.

- **Enforcement/Monitoring** It remains unclear how the FAA can offer surrounding communities assurance that the wind restriction described in the FEIS will have any actual impact on tower operations at Logan. In describing the wind restriction as a mitigation measure, the FEIS notes that it will be "defined and implemented through a Boston ATCT [Air Traffic Control Tower] directive." FEIS at 4-5. But the FEIS is not clear about how that directive will be developed, who will have input, and how its implementation will be overseen. Monitoring and reporting on performance of the wind restriction as proposed in FEIS section 4.1.2.2 is a start. But past community frustration, and erosion of confidence concerning implementation of the PRAS system, on which this monitoring regime will be based, suggest that it would help ensure broader support for this proposal if a mechanism could be used that would allow more direct involvement of the surrounding communities in the oversight and enforcement of this measure. One innovative idea for addressing community concern would be for FAA and Massport to establish an independent, neutral facilitator to assess and report on compliance with operational commitments such as the wind restriction. FAA and Massport should also commit to a schedule and deadline for the development and implementation of the monitoring and enforcement program associated with the wind restriction and other mitigation measures. As you may be aware, the Council on Environmental Quality regulations (40 CFR 1505.2(c)) state that "a monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation" in the ROD. We therefore request that the ROD contain these commitments.

- **Future Changes** The FEIS indicates that any reconsideration or potential modification of the wind restriction based on the reassessment of PRAS "would be subject to appropriate environmental review." FEIS at 4-5. In the immediately preceding discussion, however, the FEIS indicates that the "restriction can be reviewed . . . to refine the operational parameters if necessary" once the runway is commissioned. It will be important for the ROD to clarify that any such refinements are not a license to change the restriction in any way that substantially affects how air traffic is distributed around the airport. In any case, the ROD should make it clear that any substantial change to the wind restriction would trigger an EIS.

- **Appropriate Wind Threshold** The FEIS concludes that a 10 knot restriction is the appropriate level to preserve most of the delay reductions hoped for from the project, while maintaining the distribution of air traffic around the airport at levels roughly similar to CY 2000. This level has the effect of preserving the status quo. The Citizens Advisory Committee's (CAC) analysis indicates that the wind restriction at 15 knots would subject fewer people to the 65 DNL, while still preserving most of the delay reductions. Reducing the total number of people exposed to 65 DNL is a more desirable goal than simply preserving the status quo. In any case, whatever level of wind restriction the FAA selects for design purposes, the FEIS indicates that the level should be increased to assure a margin of compliance that protects the design assumptions in the FEIS. In the Operational Procedures discussion for the wind restriction mitigation commitment in section 4.1.2.1, the FEIS outlines the variety of circumstances that would cause FAA to continue using Runway 14/32 even when winds drop below 10 knots (or 15 knots, depending on the goal of the design). This discussion suggests that if the goal of the mitigation commitment is to achieve an effect of a real 10 or 15 knot restriction, it would be appropriate to set the threshold at 15 or 20 knots, combined with the various operational exceptions outlined in section 4.1.2.1.

The FEIS presents the wind restriction as a proposal. EPA believes FAA should finalize this valuable mitigation measure in the ROD for this action. There, the FAA can make a clear commitment that the wind restriction will be implemented by a date certain, so that the public has some assurance of the conditions under which the runway will be built. At the same time, the ROD should describe how unidirectional operation of the runway will be guaranteed.

Demand Management Program/Peak Period Pricing

EPA is concerned that the FEIS does not contain a defined demand management program, only a commitment to create one. EPA continues to support the development and implementation of a well defined Peak Period Pricing program now before delays mount, and we believe such a measure is necessary to ensure that the airport will be aggressively managed to avoid impacts associated with congestion and delay from overscheduling. As discussed further in the "Baseline" section below, FAA's own consultant appears to assume that some form of demand management is a virtually inevitable part of Logan's future. Therefore, it makes sense to start implementing a program now to shape Logan's future, rather than simply respond to a crisis.

Environmental Justice

EPA appreciates the care with which the FEIS assesses the demographic shifts documented in the 2000 census. EPA agrees with FAA's proposal that a truly effective northwest/southeast wind restriction would reduce the risk that noise would be shifted over communities with higher minority concentrations, and therefore reduce any environmental justice concerns. As a matter of general methodology, however, the Agency still has concerns that the consistent use of Suffolk

County communities as the sole basis for discussing disproportionate impacts does not present a complete analysis of which "population is served and or affected by race, color, or national origin and income level." DOT Order on Environmental Justice, 62 Fed. Reg. 18377, 18380 (April 15, 1997). EPA does note that table 3.6-6 presents the statewide figures for minority population, which, not surprisingly, indicate, without discussion in the FEIS, that the concentration of minorities in the areas impacted by the project is substantially higher than statewide levels. Nevertheless, we believe a faithful implementation of FAA's wind restriction concept, as outlined above, will mitigate many of the concerns EPA and others have raised about impacts on minority communities.

Baseline and Growth Projections

The FEIS in section 3.5 includes an extended discussion of the potential for Runway 14/32 to induce demand at Logan. This discussion essentially concludes that passengers' choices whether to use the airport are not significantly affected by the potential for serious delays, and therefore, mitigating those delays should not spur passenger demand at the airport: "As these delays due to northwest winds are not part of the rational consumer decision-making process, preventing these delays will not stimulate growth in Logan passenger demand . . .." FEIS at 3-37.

Notably, however, FAA's own consultant, MITRE Corporation, concludes the following:

> "Delays at Boston are already among the highest in the nation . . . and are already near or at the limits that airlines and passengers tolerate. The large increases in delay predicted in the SDEIS seem unlikely in light of actions taken in recent years to reduce delays at Atlanta, Newark, San Francisco, LaGuardia, and elsewhere. Airlines, Massport, and the Federal government would likely act to limit delay growth before delays reach levels predicted in the SDEIS." FEIS, App. J at 4.

EPA is grateful that FAA brought MITRE into the analysis to provide a different, perhaps more independent, assessment of some key issues. And consistent with that goal, MITRE appears to present a more fully rounded assessment of how a passenger decides where to fly by acknowledging that passengers' tolerance of delay has limits. Moreover, MITRE understands that recent history at other airports demonstrates that those limits have fairly predictable impacts on how airports are operated. In contrast, the FEIS expects that passengers will not modify their behavior (and choose other airports or other forms of transportation) in the face of increasing levels of delay and unpredictable service at Logan.

Unfortunately, the body of the analysis in the FEIS largely sidesteps what appears to be the significance of MITRE's point. As MITRE suggests, it is not realistic to assume unmitigated passenger growth and mounting delays as the baseline against which to conduct the environmental analysis. The FEIS treats demand management as an alternative in the analysis and assumes "unconstrained activity level" as the no-action scenario. See e.g. FEIS at 3-157. Using an unconstrained no-action scenario as the baseline for comparison may have the effect of inflating

the benefits of the new runway, as MITRE suggests. Unfortunately, because the FEIS does not incorporate MITRE's point fully, the document does not show how a more realistic comparison of a "mitigated" growth baseline would affect the environmental analysis, especially for air and noise impacts.

PRAS and a Part 150 Study

Statements on the record from the CAC indicate that they no longer support the current PRAS program. The FEIS and the earlier findings in the Commonwealth's FEIR make commitments to reevaluate the PRAS. It will be vitally important that a new PRAS enjoy the support of the public and that it is developed in a process that is deliberate and inclusive. The CAC has requested that any reassessment of PRAS be conducted in the context of a full Part 150 study that would at least ensure a thorough process involving all interested parties. If, as the FEIS indicates, FAA anticipates that it may use a new PRAS as a basis for revisiting the wind restriction, it will be critical that the new PRAS be developed using an impeccable process.

Hush-kits and a Part 161 Study

Aircraft equipped with hush-kits continue to be one of the largest contributors to the noise burden on communities surrounding Logan. Hush-kitted cargo planes operating at night are especially large contributors. We suggest that the FAA ROD encourage Massport to begin a Part 161 study of nighttime hush-kitted cargo aircraft operations.

Air Quality

Massport has committed to a number of air quality emission reduction measures that EPA believes are vital to ensuring that Logan reduces its share of emissions to improve public health in the neighborhoods surrounding Logan as well as in eastern Massachusetts. Massport's mitigation commitments are thoroughly documented in its Section 61 Findings, shown in Appendix B of the FEIS. Chapter 4 of the FEIS describes all of FAA's and Massport's mitigation commitments. Unfortunately, the FEIS does not include a strong or binding commitment by the FAA to these mitigation measures. We encourage FAA to affirmatively commit to air quality mitigation measures including Massport's Air Quality Initiative (AQI) in the ROD, and we offer specific suggestions in the attachment to this letter.

In closing, we underscore the importance of FAA making clear commitments to mitigation measures in the ROD, consistent with the requirements of NEPA. The commitments should include descriptions of operational requirements and mechanisms to enforce these measures and deadlines by which they will be fully developed and implemented. In addition, in view of the importance of the mitigation commitments to Logan's neighboring communities, we request that FAA report periodically to agencies and the public on the status and effectiveness of the mitigation measures as required by the CEQ regulations (40 CFR 1505.3 (c,d)), and that FAA commit to so doing in the ROD.

Thank you for the opportunity to comment on the FEIS. Please feel free to contact me, or Elizabeth Higgins or Tim Timmermann of the Office of Environmental Review at 617/918-1051 if you wish to discuss these comments further.

Sincerely,

Robert W. Varney
Regional Administrator

enclosure
cc:
Jane Garvey, Administrator, FAA
Bob Durand, Secretary Executive Office of Environmental Affairs
Lauren Liss, Commissioner Massachusetts Department of Environmental Protection
Senator Edward M. Kennedy
Senator John F. Kerry
Congressman Edward Markey
Congressman Michael Capuano
Governor Jane Swift
Mayor Thomas Menino
Betty Desrosiers, Massport
Anastasia Lyman, Community Advisory Committee

Technical Attachment to EPA Comment Letter on Logan Airside Improvements Planning Project Final Environmental Impact Statement

Air Quality

The FEIS for the Logan Airside Improvements Planning Project concludes that the Preferred Alternative will result in fewer airside emissions (volatile organic compounds (VOCs), nitrogen oxide (NOx), carbon monoxide (CO) and particulate matter (PM)) than the no-action alternative. EPA remains concerned about the lack of a commitment from the FAA to a number of feasible and appropriate air quality mitigation measures described below.

As EPA stated in our comments on the SDEIS, the overall pollution impacts of Logan Airport's operations are very substantial and call for significant mitigation. While emissions of volatile organic compounds and carbon monoxide are expected to drop in future years, the emissions of NOx from aircraft are expected to increase. Because other major emitters of NOx are reducing their emissions, Logan Airport is expected to become the second largest polluter of NOx emissions in Massachusetts within a few years. NOx emissions contribute to the formation of ground-level ozone or smog, a pollutant which continues to cause numerous days each summer of unhealthy air quality in eastern Massachusetts and downwind areas. For the sake of public health in Boston and surrounding communities, Logan Airport must take reasonable steps to reduce emissions associated with its operations.

Massport has already committed to a number of air quality emission reduction measures we believe are vital to ensuring that Logan reduces its fair share of emissions to improve public health in the Logan neighborhood as well as in eastern Massachusetts. Unfortunately, FAA appears to have taken the position that the proposed airside activities will not significantly affect air quality and, consequently, FAA does not need to commit to implementing air quality mitigation measures. This conclusion is drawn from the following information in the FEIS:

- FAA lends support to Massport's voluntary efforts with its tenants to decrease emissions at Logan Airport, but then appears to disassociate itself from making such mitigation legally enforceable by stating that "FAA has a national stakeholder process involving various industry groups and believes this issue should be addressed at the national level;"

- FAA does not support air quality improvement measures already committed to by Massport and identified in Massachusetts Environmental Policy Act's Section 61 Finding. The response to comments section of the FEIS refers to Chapter 4, Mitigation, for a description of all of FAA's and Massport's mitigation commitments. Unfortunately, Chapter 4 does not contain a clear commitment to these air quality mitigation measures.

- FAA does not support Massport's AQI for Logan Airport, a strategy for maintaining NOx emissions associated with Logan Airport operations at 1999 levels. Instead of supporting this environmentally beneficial program, FAA takes the position that the AQI program

should be suspended and that Massport should instead work within the EPA/FAA's national stakeholders process. However, in a confusing twist, FAA also states, "FAA expects that the AQI will be implemented in a manner consistent with applicable federal law."

- With respect to Massport's continued efforts to convert ground support equipment and ground service vehicles to clean alternative fuels including compressed natural gas (CNG) and electricity by writing such strategies in leases and agreements with the air carriers and service providers, FAA does support Massport's voluntary efforts with its tenants to decrease emissions at Logan Airport. However, the FEIS goes on to state that FAA has a national stakeholder process involving various industry groups and believes this issue should be addressed at the national level.

EPA believes that there are number of effective and feasible strategies that can be undertaken to mitigate the air quality impacts of Logan Airport operations. FAA recognizes EPA's efforts in mandating that manufacturers produce cleaner engines for both heavy duty diesel engines and non-road engines (Tier 1 and Tier 2 standards) as well as EPA's efforts requiring fuel refineries to reduce the amount of sulfur in gasoline and diesel fuel in future years. However, EPA believes substantial benefits could occur today with the use of highway diesel fuel in diesel construction equipment. We request that diesel construction equipment use highway diesel fuel (fuel with a maximum sulfur content of 500 parts per million) for all construction at Logan. Currently earth moving construction equipment and other construction vehicles that remain on the construction site are exempted from using highway diesel fuel and can use a diesel fuel with a sulfur content that could be as high as 2,500 to 3,000 parts per million sulfur (unregulated). Highway diesel fuel is readily available and would provide the benefit of reducing particulate matter. There is a ultra-low sulfur diesel fuel in the New England market which would achieve even greater emission benefits. However, at the least, significant emission benefits would be achieved by using readily available highway diesel fuel.

On several occasions, EPA has requested that FAA commit to a number of air quality emission reduction measures already supported by Massport including:

(1) **Support regional transportation strategies.** Commit to implement reasonable transportation strategies identified in the ongoing "New England Airports System Study," which will evaluate the potential for international, charter, and cargo services at each of the regional airports; evaluate capacity issues at each of the regional airports; and consider the development of high occupancy vehicle/ground transportation and rail alternatives to improve access to the regional airports.

(2) **Develop an airline schedule monitoring system, and implement a "Peak Period Monitoring System"** as discussed in the body of this letter, to determine when airline over scheduling becomes a significant contributor to delays.

(3) **Endorse the Massport Air Quality Initiative** (AQI). This initiative caps nitrogen oxide and volatile organic compounds emissions, two key ingredients for ground level ozone, at 1999 levels.

(4) **Support and make legally binding Massport's Program to Reduce Emissions From Ground Support Equipment** (GSE) through the use of alternative fuel (cleaner burning fuels) or conversion of a portion of its GSE fleet to electric-powered ground support equipment. FAA should support Massport's effort to convert ground support equipment and ground service vehicles to clean alternative fuels, including CNG and electricity, by writing such strategies in leases and agreements with the air carriers and service providers and expanding the ongoing "Clean Air Partners" program in which tenants can receive reimbursement for electric ground support equipment.

(6) **Support Massport's Clean Air Construction Initiative** in cooperation with MA DEP and Northeast States for Coordinated Air Use Management (NESCAUM). Massport will require contractors to retrofit their heavy-duty construction equipment with advanced pollution control devices during construction in accordance with the DEP's Clean Air Construction Initiative.

(7) **Support ongoing airport access measures.** Push Massport to enhance its accomplishments in promoting mass transit access and marketing alternative travel modes (Logan Express - Logan DART) for the flying public and airport employees to travel to Logan.

(8) **Support Massport's efforts to install retrofits for diesel trucks, buses, and other equipment.** Massport will require particulate matter filter retrofits of diesel equipment not already being converted to an alternative fuel or electric. Control of particulate matter from such vehicles will provide local air quality benefits to mitigate any potential impacts from such equipment.